REMARKS

The Office Action objected to the drawings because lines for element numbers 52 and 53 in Figure 4 appear to point to the same part, but paragraph 54 appears to describe them as separate parts. Applicant respectfully traverses the rejection. As noted in Paragraph 48 of the specification, second light receiving section 53 is the end of second receiving protecting cover 52. As seen in Figure 4, second light receiving section 53 points to an end of second receiving protecting cover 52. Furthermore, there does not appear to be any statements to the contrary in Paragraph 54 of the specification. Paragraph Figure 54 includes descriptions of second light receiving section 53, but does not discuss second receiving protecting cover 52. Therefore, Applicant respectfully requests that the rejection be withdrawn.

The Office Action objected to Claims 9-12 as being indefinite. Applicant has amended Claim 9 to overcome the objection and respectfully requests that the rejection be withdrawn.

The Office Action rejected Claims 1-12 as being unpatentable over *Ma et al.* (U.S. 6,486464).

> [T]he dispositive question regarding anticipation is whether one skilled in the art would reasonably understand or infer from the prior art reference's teaching that every claim [limitation] was disclosed in that single reference.

Dayco Prods., Inc. v. Total Containment, Inc., F.3d 1358, 1368 (Fed. Cir. 2003).

Ma is an automated transaction machine which includes an apparatus for distinguishing between single sheets and multiple sheets. It accomplishes this by emitting radiation from one more radiation emitters and receiving the radiation from the radiation emitters at one or more radiation detectors. (Abstract) The output from the radiation detector from one side of the sheet

is compared with the output from the radiation detector from the other side of the sheet to distinguish one or more sheets. (Col. 3, lns. 18 – 26).

Ma does not disclose "a first emitting amount adjusting unit adjusting an emitting amount of the first light emitting section such that the emitting amount of the first light emitting section reaches a first predetermined emitting amount, wherein the adjustment of the emitting amount of the first light emitting section is performed through detection of the first light by the first light receiving section" and "a second emitting amount adjusting unit adjusting an emitting amount of the second light emitting section such that the emitting amount of the second light emitting section reaches a second predetermined emitting amount, wherein the adjustment of the emitting amount of the second light emitting section is performed through detection of the second light by the second light receiving section." There is no teaching within *Ma* that the amount of light emitted by first light emitting section should be adjusted and more specifically the amount of light emitted by first light emitting section should be adjusted based on the light received by the first light receiving section. Furthermore, there is no teaching within *Ma* that the amount of light emitted by second light emitting section is adjusted nor that such light should be adjusted through detection of the light from the second light emitting section by the second light receiving section. That is, there is no teaching that the amount of radiation emitted by radiation sources 14 or 34 should be adjusted in order to be calibrated.

In contrast, in the present invention, when the initial setting signal "IN" is distinguished, the first light emitting element 47 emits at a predetermined voltage and the light emitted is received by the first light receiving element 62 and amplified by amplifier 86. The output of amplifier 86 is compared with a standard voltage. When the output is larger than the standard voltage, the current is adjusted to reduce the light emitted by the first light emitting element 47

through the first light amount adjusting circuit 81. When the output is smaller than the standard voltage, the current is adjusted to increase the light emitted by the first light emitting element 47 through the first light amount adjusting circuit 81. A similar process is performed for the second light emitting element 58. (¶ 0070).

Ma does not teach or suggest "a second amplifier for the first reflection sensor unit adjusting a gain of the output of the second light receiving section such that the gain of the output of the second light receiving section reaches a first predetermined amount defined for the second light receiving section when a standard paper for adjusting is inserted into the banknote passageway and light is emitted from the first light emitting section" or "a fourth amplifier for the second reflection sensor unit adjusting a gain of the output of the first light receiving section such that the gain of the output of the first light receiving section reaches a second predetermined amount defined for the first light receiving section when a standard paper for adjusting is inserted into the banknote passageway and light is emitted from the second light emitting section." There is no indication that preamplifier 182, preamplifier 184, low-pass amplifier 190, low-pass amplifier 192, or low-pass amplifier 196 adjust the gain of the photo diode 1 and the gain of the photo diode 2 based on a predetermined amount that is acceptable when a standard paper for adjusting is inserted into the banknote passageway. (Figure 10) That is, there is no teaching of a calibration for the radiation detectors such as radiation detectors 20, 40, 44, etc. and more specifically no teaching that the calibration and/or initialization can be accomplished through the use of a standard paper for adjusting.

In contrast, in the present invention, when a standard calibrating paper for adjusting is inserted into the banknote passageway from banknote entry 8, the output of second light receiving element 51 is amplified by amplifier 83 for the first reflecting sensor and is converted

to a digital signal by third A/D converting circuit 84, and subsequently outputted to microprocessor 74. The digital signal is then compared to the standard level voltage and when the digital signal exceeds the standard voltage, the gain of amplifier 83 for the first reflecting sensor is reduced to correspond to the standard voltage. (¶ 0071) A similar process can be performed for the output of the first light receiving element 62.

With respect to Claim 14, *Ma* fails to recite "an initial setting button connected to the microprocessor." There is no teaching within *Ma* that there should be a button for an initial setting to calibrate the unit and/or perform initiation.

In contrast, the present invention includes an initial setting button 88 which starts an initial setting when pushed. When initial setting button 88 is pushed, an initial setting signal IN is sent to microprocessor 74. (¶ 0069)

For the reasons stated above, Applicant now believes the application is in condition for allowance and early notification of the same is respectfully requested.

If the Examiner believes a further telephone conference would assist in the prosecution, the undersigned attorney can be contacted at the listed phone number.

Very truly yours,

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